

REMARKS

In response to the Final Office Action mailed 7 June 2005, the applicants submit the enclosed amendments and the following remarks. In the Final Office Action, the examiner maintained that Freudberg (U.S. Patent No. 4,696,031) anticipates independent claims 1, 16, and 24. In addition, the examiner maintained that all dependent claims are anticipated or obvious in view of Freudberg and/or a combination of Freudberg with Gupta (U.S. Patent No. 5,649,012). While the applicants still disagree with the examiner on many of the points discussed in the previous communications, the following remarks focus on the calculating step of the independent claims.

Interview Summary

In response to the Final Office Action, the applicants' representative contacted the examiner in early July 2005 to further discuss the rejections. In addition, the applicants' representative spoke with the examiner and his supervisor on 19 July 2005. During these phone conversations, the examiner re-affirmed his assertion that the broad definition of the word "calculate," as used in the independent claims, includes the threshold selection process taught by Freudberg. However, the examiner agreed that Freudberg does not calculate the ringback threshold in the same manner as taught by the instant application. The applicants' representative proposed amending the independent claims to further clarify this distinction. Unfortunately, the examiner indicated that this type of amendment would not be entered because the new claim language would require a new search.

§102 Rejections – Independent Claims

The examiner asserts that Freudberg anticipates independent claims 1, 16, and 24 because *inter alia* the threshold election process implemented by Freudberg corresponds to the claimed calculating step of claim 1. While the applicants still disagree with this assessment, the

applicants amend the calculating step of claim 1 to further distinguish the claimed calculating step, as shown in the attached “Amendments to the Claims.” In particular, the applicants replace the calculating step of original claim 1 with “determining a current ringback detection threshold from the current value of signal energy” and “comparing the current ringback detection threshold to a previous ringback detection threshold and selecting one of them as an adaptive ringback detection threshold.” The applicants also amend claim 2 to conform the claim language to that of claim 1. Support for these amendments may be found at least in Figure 3 and page 10, line 5 through page 11, line 9. No new matter is added.

As discussed in previous communications, Freudberg at best teaches selecting a threshold from a plurality of fixed, predetermined threshold values based in part on the energy measurement (see column 6, lines 3 – 14 of Freudberg). However, nothing in Freudberg teaches or suggests determining a current ringback detection threshold from the calculated signal energy, and selecting one of the current ringback detection threshold and a previous ringback detection threshold as the adaptive ringback threshold based on a comparison between the current ringback detection threshold and the previous ringback detection threshold. For at least this reason, Freudberg does not anticipate independent claim 1. Further, because Freudberg does not anticipate claim 1, Freudberg necessarily does not teach or suggest the limitations of dependent claims 2 – 15. The applicants respectfully request reconsideration.

The applicants also amended independent claims 16 and 24 to clarify that the threshold calculator determines the current ringback detection threshold based on the calculated signal energy and selects the adaptive ringback detection threshold based on a comparison between the current ringback detection threshold and the adaptive ringback detection threshold. Therefore, for substantially the same reasons, independent claims 16 and 24 and dependent claims 17 – 18 and 25 – 31 are also patentably distinct from Freudberg. The applicants respectfully request reconsideration.

New Claims

The applicants also added new claims 32 – 37. New independent claim 35 claims a method for detecting ringback based on a comparison between a calculated energy of a received signal and an adaptive ringback detection threshold. In addition, claim 35 claims adapting the adaptive ringback detection threshold as a function of the signal energy calculated in each frame. Support for this new claim may be found at least in Figure 3 and page 10, line 5 through page 11, line 9. No new matter is added. Claim 35 clearly requires adapting the adaptive ringback detection threshold as a function of the signal energy calculated in each frame. As discussed above, Freudberg simply teaches selecting a threshold from a plurality of fixed, predetermined thresholds stored in memory. As such, nothing in Freudberg teaches or suggests adapting a ringback threshold as a function of the calculated energy. In addition, nothing in Freudberg teaches or suggests adapting the adaptive ringback detection threshold based on signal energy calculated in each frame of the received signal. For at least these reasons, new independent claim 35 is new and non-obvious over Freudberg.

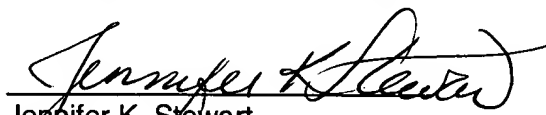
New dependent claims 32 – 34 and 36 - 37 further define the process for determining the adaptive ringback detection threshold. In particular, claim 36 requires calculating a current ringback detection threshold based on the calculated energy and selecting one of the current ringback detection threshold and a previous ringback detection threshold as the adaptive ringback detection threshold based on a comparison between the current ringback detection threshold and a previous ringback detection threshold; claims 32 – 34 and 37 require determining the current ringback detection threshold based on filtered versions of the calculated energy and the previous ringback detection threshold. Because nothing in Freudberg teaches or suggests any of these limitations, new claims 32 – 34 and 36 - 37 are also patentably distinct from the cited art.

Conclusion

In light of the enclosed amendments and the above remarks, the applicants submit that the cited art does not teach or suggest each and every limitation of claims 1 – 18 and 24 – 37. Therefore, the applicants respectfully request that the examiner reconsider the rejections and allow the application to move forward to allowance.

Respectfully submitted,

COATS & BENNETT, P.L.L.C.



Jennifer K. Stewart
Registration No.: 53,639

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P.O. Box 5
Raleigh, NC 27602
Telephone: (919) 854-1844
Facsimile: (919) 854-2084